

November 14, 2003



RECEIVED  
CA BAY-DELTA AUTHORITY  
MAIL ROOM

2003 NOV 18 AM 9:06

Mr. Ron Ott  
California Bay-Delta Authority  
650 Capital Mall, 5th Floor  
Sacramento, CA 95814

Dear Ron:

I am taking this opportunity to provide more information regarding the diversion concept that I presented to you and which you briefly explained during the November 3 meeting of the SDFFF. During that meeting I had hoped to have a chance to further explain my proposal.

Let me give you a little background. During the development of the Delta Wetlands Project, out of necessity, we had to develop a diversion system that could deal with highly variable differential elevation heads. Of course, we had to have a fish screen suitable to the appropriate fishery agencies. Our present thinking utilizes a fish screen developed by C.E. Toland & Son whose factory is located in Benicia, California. Their screen is continuously cleaned and its patented design feature is that it can operate at a variety of flow rates with uniform approach velocity across the screening surface. It is anticipated that the entire diversion system can be completed at a cost of approximately \$15,000 per cubic-foot per second. This figure does not include electrical service.

The concept of screening fish out of Clifton Court Forebay only makes sense if the near-field losses associated with leaving the fish in the Delta are less than the losses due to predation in the Forebay, plus the cumulative losses associated with CHTR. If that is the case (which I suspect it is), then this solution may indeed be the appropriate biological and economical fix. An advantage of this system is that the rate of total diversion can be altered on a real-time schedule with a variety of limiting conditions, including water elevation, project demand and presence of fish in the near-field zone. If fish populations in the near-field zone build up to unacceptable levels, water can be accumulated in Clifton Court Forebay and then released on an outgoing tide through the existing radial gates at the same time as pumping is reduced and the lower end South Delta barriers are opened to help with an outgoing flush.

This concept works best if Clifton Court Forebay can be a combined forebay for both the state and federal pumps.

3697 Mt. Diablo Blvd.  
Suite 100  
Lafayette, CA 94549-3746

tel 925.283.4216  
fax 925.283.4028

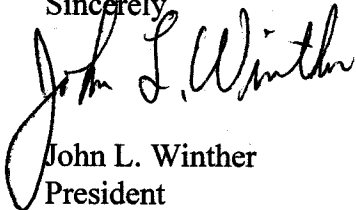
Mr. Ron Ott  
November 14, 2003  
Page 2



It is my understanding that the appropriate agencies will be doing further studies on near- and far-field losses in addition to the work that they are doing on predation and CHTR losses. It would be a simple matter to model at least the hydraulic effect of adding eight or ten thousand acre-feet of water to an outgoing tide pulse to see what might be the effects with regard to fish mortality. If those studies suggest a further consideration of the concept that I have put forward, C.E. Toland & Son is interested in making a proposal to build a demonstration facility.

I would be happy to discuss in detail the substance of this letter and my earlier proposal with any interested parties.

Sincerely,

  
John L. Winther  
President

JLW:kf

cc: Mr. Blake Toland  
C.E. Toland & Son